1. Where does all the matter in the universe come from?

**How the Universe Works**

1. In 1929, Edwin Hubble discovered what fact about galaxies? Why does this matter?
2. How might scientist know how old the universe is?
3. Is it possible for a human being to look back in time? If so, how?
4. T/F – The big bang started at a singular point.
5. What force that needs to be “just so” was the first to appear?
6. The big bang was an event of massive speed. It was even faster than the speed of…?
7. The first known bits of matter were created by what?
8. The motion of the first sub atomic particles would be described as…
9. What is the largest machine in the world?
   1. Why is the detector so large?
10. For every billion particles of antimatter there were roughly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ particles of matter.
11. What is the first element to form in the early universe?
    1. Over the next three minutes, two more elements were formed. What are the names of these elements?
12. When a satellite took the first readings of the temperature of space, scientists created the first \_\_\_\_\_\_\_\_\_\_\_\_ of our universe. This was called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. Areas of less density eventually formed open space. Areas of higher density became construction sites of….
14. How many years after the big bang did the first galaxy form?
15. Roughly nine billion years after the big bang, what event (that really matters to you) happened?
16. Has the big bang stopped?
    1. Is the universe speeding up or slowing down?
17. Do scientists know how the universe will end? Give one idea that scientists have proposed.